Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	105	106	107	485	108	109		110	486		111	491	492	
		River Mile	794.5	794.1	793.1	793.1	792.8	792.8	792.8	792.5	792.5	792.5	792.2	791.5	791.5	791.5
		Location	TRENTON	TRENTON	CANNON RIVER	CANNON RIVER	CANNON RIVER	CANNON RIVER	CANNON RIVER 1	CANNON RIVER	CANNON RIVER	CANNON RIVER 2	CANNON RIVER	REDWING COMM	REDWING COMM	REDWING COMM 1
		Year	1981	1981	1982	1989	1978	1978	1994	1974	1989	1994	1982	1989	1989	1994
		System	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	1	1	1	1	1	1	1	1	1	1	1	2	2	1
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Sam. Depth	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Data Clt.	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE
CHC'S	ug/kg	a-BHC				< 0.07			< 0.24		< 0.07	< 0.24		< 0.1	< 0.16	< 0.32
	ug/kg	b-BHC				< 0.15			< 0.24		< 0.15	< 0.24		< 0.2	< 0.32	1
	ug/kg	BHC				< 0.22			< 0.24		< 0.22	< 0.24		< 0.3	< 0.48	< 0.32
	ug/kg	g-BHC (lindane)				< 0.1			< 0.24		< 0.1	< 0.24		< 0.14	< 0.21	< 0.32
	ug/kg	Heptachlor				< 0.07			< 0.24		< 0.07	< 0.24		< 0.1	< 0.16	< 0.32
	ug/kg	Aldrin				< 0.1					< 0.1			< 0.14	< 0.21	
	ug/kg	Heptachlorepoxide				< 0.12					< 0.12			< 0.17	< 0.26	
	ug/kg	Endosulfan I				< 0.12					< 0.12			< 0.17	< 0.26	
	ug/kg	Dieldrin	< 0.1	< 0.1	< 0.1	< 0.12	0	0	< 0.48	< 10	< 0.12	< 0.48	< 0.1	< 0.17	< 0.26	< 0.65
	ug/kg	4,4'-DDE	< 0.1	< 0.1	< 0.1	< 0.1	0	0	< 0.48	< 10	< 0.1	< 0.48	< 0.1	< 0.14	< 0.21	< 0.65
	ug/kg	Endrin	< 0.1	< 0.1	< 0.1	< 0.22	0	0	< 0.48	< 10	< 0.22	< 0.48	< 0.1	< 0.3	< 0.48	< 0.65
	ug/kg	Endosulfan II				< 0.24					< 0.25			< 0.34	< 0.53	
	ug/kg	4,4'-DDD	< 0.1	< 0.1	< 0.1	< 0.27	0	0	< 0.48	< 10	< 0.27	< 0.48	< 0.1	< 0.37	< 0.58	< 0.65
	ug/kg	Endrinaldehyde				< 0.27					< 0.27			< 0.37	< 0.58	
	ug/kg	Sulfan sulfate				< 0.27					< 0.27			< 0.37	< 0.58	
	ug/kg	4,4'-DDT	< 0.1	< 0.1	1	< 0.31	0	0	< 0.48	< 10	< 0.32	< 0.48	< 0.1	< 0.44	< 0.69	< 0.65
	ug/kg	Methoxychlor				< 0.53					< 0.55			< 0.74	< 1.16	
	ug/kg	Endrinketone				< 0.27					< 0.27			< 0.37	< 0.58	
	ug/kg	Chlorodane	< 1	< 1	< 1	< 1.45	0	0	< 0.24	< 10	< 1.49	< 0.24	< 1	< 2.03	< 3.17	< 0.32
	ug/kg	Toxaphene				< 1.45					< 1.49			< 2.03	< 3.17	
METALS	mg/kg	Ag (silver)														
	mg/kg	Al (aluminum)														
	mg/kg	As (arsenic)	< 1	0	1.2	< 1.05	0	0	1.5	< 0.7	< 1	1.4	1.3	2.5	2.9	2.8
	mg/kg	B (boron)														
	mg/kg	Ba (barium)	10	10			10	10								
	mg/kg	Be (beryllium)														
	mg/kg	Cd (cadmium)	< 1	< 1	< 0.18	< 1.5	< 10	< 10	< 0.13	< 1	< 1.1	< 0.11	0.18	< 1.64	2.5	0.74
	mg/kg	Cr (chromium)	< 10	< 10	3.5	3.7	< 10	< 10	8.7	17	4.3	5.1	4.6	23.3	51	25.2
	mg/kg	Cu (copper)	< 10	< 10	1.8	2.2	< 10	< 10	3.1	10	< 1.45	1.2	2.3	8.3	25	11.6
	mg/kg	Fe (iron)	2300	2600	4100		1700	2400					4500			
	mg/kg	Hg (mercury)	< 0.01	< 0.01	0.042	< 0.01	0.47	0.66	0.11	0.4	< 0.01	< 0.04	0.066	< 0.02	0.13	0.08
	mg/kg	Mg (magnesium)														
	mg/kg	Mn (manganese)	140	140		201	970	180	308		165	234		734	986	781
	mg/kg	Mo (molybdenum)														
	mg/kg	Ni (nickel)	< 10	< 10	5	6.8	< 10	< 10	6.4	77	< 5.46	4.9	5	8.7	26	13.2
	mg/kg	Pb (lead)	< 10	< 10	2	< 0.85	< 10	< 10	7.1	< 6	1.2	4	3.4	11.2	24.9	10.5
	mg/kg	Sb (antimony)														
	mg/kg	Se (selenium)				< 0.88					< 0.83			< 1.25	< 1.84	
	mg/kg	Sn (tin)														
	mg/kg	Sr (strontium)														
	mg/kg	Ti (titanium)														
	mg/kg	Zn (zinc)	7	10	10	12.8	< 10	10	18.6	15	12	11	14	49.2	114	50.3
	mg/kg	V (vanadium)														
PCB'S	ug/kg	Aroclor-1006				< 1.45			< 4.8		< 1.49	< 4.8		< 2.03	< 3.17	< 6.5
	ug/kg	Aroclor-1221				< 1.45			< 4.8		< 1.49	< 4.8		< 2.03	< 3.17	< 6.5
	ug/kg	Aroclor-1232				< 1.45			< 4.8		< 1.49	< 4.8		< 2.03	< 3.17	< 6.5
	ug/kg	Aroclor-1242				< 1.45			< 4.8		< 1.49	< 4.8		< 2.03	< 3.17	< 6.5
	ug/kg	Aroclor-1248				< 1.45			< 4.8		< 1.49	< 4.8		< 2.03	< 3.17	< 6.5
	ug/kg	Aroclor-1254				< 3.03			< 4.8		< 3.1	< 4.8		< 4.23	< 6.6	< 6.5
	ug/kg	Aroclor-1260				< 3.03			< 4.8		< 3.1	< 4.8		< 4.23	< 6.6	< 6.5
	ug/kg	Total PCB's	0	0	0		0	0		0			0			
PARTICLE SIZE %FINER	SAND coarse	3 in					100	100		100						
		1 1/2	100	100	100		100	100		100			100			
		3/4	100	100	100		100	100		100			100			
		3/8	100	100	100		100	100		100			100			
		4	100	100	100	100	100	100	99.5	100	100	100	100	100	100	100
		8	98	98	99					100			100			
		10				100	100	98	97.7		99.8	98.6		99.9	99.9	99.7
	SAND medium	16	93.0	90.0	95.0	99.2				99.0	98.0		99.0	99.5	99.4	
		20					97.0	88.0	90.1			89.2				99.2
		30	74.0	70.0	72.0	71.8					81.7		91.0	97.9	98.4	
		40	60.0	50.0	46.0		69.0	58.0	65.7	90.0		49.7	78.0			97.8
		50	40.0	18.0	16.0	71.8					81.7		60.0	97.9	98.4	
	SAND fine	70	23.0	5.0	5.0								38.0			
		80				10.3	8.0	5.0			14.7			89.9	97.1	
		100	11.0	2.0	2.0	0.6			24.4	2.0	0.4	0.9	18.0	55.4	88.5	77.9
		140				0.5			22.9		0.6	0.6		39.6	76.7	69.0
	SILT	200	5.0	1.0	2.0	0.5	2.0	1.0	22.4	0.0	0.4	0.5	11.0	24.9	49.3	64.8
	CLAY	270	1.0	0.0	2.0	0.4							10.0	17.9	30.2	
		0.20 mm	0.0	0.0	1.0		1.0	1.0		0.0			3.0	14.5	22.5	
		0.05 mm	0.0	0.0	0.0		0.0	0.0		0.0			1.0	9.6	12.1	
MISC	%	Total Organic Carb				0.47			0.134		0.5	0.038		4	11.9	1.02
	mg/kg	Chem Oxy Demand	430	15000	984		1800	2400		2553			5595			
	mg/kg	Kjedahl Nitrogen	215	695	27		200	390		61			157			
	mg/kg	Total Phosph	--	--	140		37	80		164			295			
	mg/kg	Oil and Grease	0	0	< 50		0	100		58			55			
	mg/kg	Cyanide, Total				< 0.6			< 0.07		< 0.61	< 0.06		< 0.9	< 1.4	< 0.09
	mg/kg	Ammonia				< 0.24					0.9			47.00	86	
	mg/l	Ammonia Elutriate							5.40			< 0.06				1.10
	%	Moisture				16.9			24.1		17.8	15.6		44.4	63	42.7
	%	Total Solids				83.1			75.9		82.2	84.4		55.6	37	57.3
	%	Volatile Solids				0.7			1.5		0.5	0.95		5.4	6.7	5.2

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	112	113	489	490	114	115	488	487	116	333	335	334	374
		River Mile	791.4	791.4	791.2	791.2	791.0	791.0	791.0	790.1	789.8	786.5	786.0	786.0	786.0
		Location	REDWING COMM	AB&BW REDWING HWY BR	REDWING SM BOAT	REDWING SM BOAT	REDWING SM BOAT	REDWING SM BOAT	AB&BW REDWING HWY BR	AB&BW REDWING HWY BR	AB&BW REDWING HWY BR	L-Lk Pepin-Bay City 1-1	L-Lk Pepin-Bay City 2-2	L-Lk Pepin-Bay City 2-1	Lk Pepin-Bay City/Ser-5
		Year	1980	1980	1989	1989	1979	1979	1989	1989	1980	1987	1987	1987	1988
		System	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	2	1	2	2	2	2	1	1	1	3	3	3	3
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	1	1	1	1	1	1	4	4	4	1
		Sam. Depth	10	10	10	10	10	10	10	10	10	76	77-152	76	10
		Data Cit.	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE
CH'C'S	ug/kg	a-BHC	< 0.39		< 0.09	< 0.11			< 0.07	< 0.07		< 5	< 5	< 5	< 0.06
	ug/kg	b-BHC	2.6		< 0.19	< 0.21			< 0.15	< 0.15		< 5	< 5	< 5	< 0.12
	ug/kg	BHC	< 0.39		< 0.28	< 0.32			< 0.22	< 0.22					
	ug/kg	g-BHC (lindane)	< 0.39		< 0.12	< 0.14			< 0.1	< 0.1		< 5	< 5	< 5	< 0.08
	ug/kg	Heptachlor	< 0.39		< 0.09	< 0.11			< 0.07	< 0.07		< 5	< 5	< 5	< 0.06
	ug/kg	Aldrin			< 0.12	< 0.14			< 0.1	< 0.1					
	ug/kg	Heptachlorepoxide			< 0.16	< 0.18			< 0.12	< 0.12					
	ug/kg	Endosulfan I			< 0.16	< 0.18			< 0.12	< 0.12					
	ug/kg	Dieldrin	< 0.79	0	< 0.16	< 0.18	1.2	0	< 0.12	< 0.12	0.2	< 5	< 5	< 5	< 0.04
	ug/kg	4,4'-DDE	1.5	0	< 0.12	< 0.14	5.3	1.1	< 0.1	< 0.1	0	< 5	< 5	< 5	< 0.08
	ug/kg	Endrin	< 0.79	0	< 0.28	< 0.32	0	0	< 0.22	< 0.22	0	< 5	< 5	< 5	< 0.12
	ug/kg	Endosulfan II			< 0.31	< 0.36			< 0.25	< 0.25					
	ug/kg	4,4'-DDD	0.93	0	< 0.34	< 0.39	4.2	1.6	< 0.27	< 0.27	1.5	< 5	< 5	< 5	< 0.22
	ug/kg	Endrinaldehyde			< 0.34	< 0.39			< 0.27	< 0.27					
	ug/kg	Sulfan sulfate			< 0.34	< 0.39			< 0.27	< 0.27					
	ug/kg	4,4'-DDT	< 0.79	0	< 0.41	< 0.46	1.2	0	< 0.32	< 0.32	0.3	< 5	< 5	< 5	< 0.24
	ug/kg	Methoxychlor			< 0.69	< 0.78			< 0.55	< 0.55					
	ug/kg	Endrinketone			< 0.34	< 0.39			< 0.27	< 0.27					
	ug/kg	Chlorodane	< 0.39	0	< 1.87	< 2.14	9	0	< 1.49	< 1.49	0	< 5	< 5	< 5	< 0.29
	ug/kg	Toxaphene			< 1.87	< 2.14			< 1.49	< 1.49					
METALS	mg/kg	Ag (silver)													
	mg/kg	Al (aluminum)													
	mg/kg	As (arsenic)	4	0	< 1.36	< 1.52	3	6	< 0.98	< 1.11	0	58.2	< 1.2	< 1.2	24
	mg/kg	B (boron)													
	mg/kg	Ba (barium)		40			150	170			40				
	mg/kg	Be (beryllium)													
	mg/kg	Cd (cadmium)	1.3	< 10	< 1.49	< 1.67	< 10	< 10	< 1.07	< 1.22	< 10	< 1.5	< 1.5	< 1.5	2.3
	mg/kg	Cr (chromium)	27.5	10	18.1	21.2	40	60	6.9	6.9	10	< 3.7	< 3.7	8.9	38
	mg/kg	Cu (copper)	17.8	< 10	6.8	9.9	30	30	< 1.4	2.57	< 10	15.8	8.9	8.9	21
	mg/kg	Fe (iron)	22900	6100			17000	21000			6900				
	mg/kg	Hg (mercury)	0.035	0	< 0.02	< 0.02	0	0	< 0.01	< 0.01	0	< 0.8	< 0.8	< 0.8	0.26
	mg/kg	Mg (magnesium)													
	mg/kg	Mn (manganese)	936	550	62.2	7.8	1200	1200	213	237	500	1077.5	721.8	721.8	850
	mg/kg	Mo (molybdenum)													
	mg/kg	Ni (nickel)	16.2	< 10	8.8	11.6	20	20	< 5.17	6.9	< 10	< 12.9	27.8	< 12.9	23
	mg/kg	Pb (lead)	8.08	< 10	11.4	13.4	60	50	2.3	35.2	< 10	37.2	34.7	33.2	34
	mg/kg	Sb (antimony)													
	mg/kg	Se (selenium)			< 1.14	< 1.27			< 0.81	< 0.93					< 38
	mg/kg	Sn (tin)													
	mg/kg	Sr (strontium)													
	mg/kg	Ti (titanium)													
	mg/kg	Zn (zinc)	78.3	216	30	50.2	59.3	100	110	11.1	21.5	40	124.8	111.7	103	110
	mg/kg	V (vanadium)													
PCB'S	ug/kg	Aroclor-1006	< 7.9		< 1.87	< 2.14			< 1.49	< 1.49					< 1.2
	ug/kg	Aroclor-1221	< 7.9		< 1.87	< 2.14			< 1.49	< 1.49					
	ug/kg	Aroclor-1232	< 7.9		< 1.87	< 2.14			< 1.49	< 1.49					
	ug/kg	Aroclor-1242	< 7.9		< 1.87	< 2.14			< 1.49	< 1.49					
	ug/kg	Aroclor-1248	< 7.9		< 1.87	< 2.14			< 1.49	< 1.49					
	ug/kg	Aroclor-1254	41		< 3.9	< 4.45			< 3.1	< 3.1					< 2.4
	ug/kg	Aroclor-1260	< 7.9		< 3.9	< 4.45			< 3.1	< 3.1					< 2.4
	ug/kg	Total PCB's	59.8	0			51	82			18	0	0	0	
PARTICLE SIZE %FINER	SAND coarse	3 in	100	100			100	100			100				
		1 1/2	100	100			100	100			100				
		3/4	100	100			100	100			100				
		3/8	100	100			100	100			100				
		4	100	100	99.9	100	100	100	100	100	100				
		8	100	84							100				
		10			99.9	100	100	98	100	99.9					
	SAND medium	16	100.0	70.0	99.4	99.5			99.3	99.1	99.0				
		20	100.0				99.0	98.0							
		30			98.4	98.5			71.7	95.2					
		40	99.7	51.0			99.0	98.0			68.0				
		50			98.4	98.5			71.7	95.2					
	SAND fine	70													
		80			95.0	95.9	99.0	96.0	19.8	49.9					
		100	99.2	98.0	27.0	46.0	54.9		1.8	9.3	30.0				
		140	97.9			30.6	34.2		1.6	7.6			94.3	97.8	
	SILT	200	96.4	96.0	13.0	19.6	23.4	98.0	93.0	1.0	7.0	27.0			
		270				17.2	15.1				5.2			75.5	70.4
	CLAY	0.20 mm			3.0	11.7	13.0	60.0	65.0		4.5	15.0		44.4	36.8
		0.05 mm	50.0	1.0	8.3	9.0	20.0	29.0			3.0	7.0		44.4	36.8
MISC	%	Total Organic Carb	> 1.6		1.42	2.84			0.2	0.9			4.06	4.88	
	mg/kg	Chem Oxy Demand	35200	7600			180000	99000			17000				
	mg/kg	Kjedahl Nitrogen	--	1100			8400	6800			1600				
	mg/kg	Total Phosph	3140	--			1200	1200			--				
	mg/kg	Oil and Grease	530	0			0	0			0				
	mg/kg	Cyanide, Total	< 0.11		< 0.84	< 0.95			< 0.64	< 0.66					
	mg/kg	Ammonia			20	33.0			1.4	10.8					
	mg/l	Ammonia Elutriate	0.7												
	%	Moisture	53.5		40.8	47.4			21.5	24.7					
	%	Total Solids	46.5		59.2	52.6			78.5	75.3					
	%	Volatile Solids	7.03		4.3	5.0			0.6	1.3					

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	370	373	369	371	372	117	336	337	118	119	120	121	122	338
		River Mile	786.0	786.0	786.0	786	786	785.9	785.6	785.4	785.32	785.31	785.3	785.01	785	785.0
		Location	Lk Pepin-Bay City/Key-5	Lk Pepin-Bay City/Ser-4	Lk Pepin-Bay City/Key-4	Lk Pepin-Bay City/Pac-4	Lk Pepin-Bay City/Pac-5	BAY CITY SM BOAT	L-Lk Pepin-Bay City 3-1	L-Lk Pepin-Bay City 4-1	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	L-Lk Pepin-Bay City 5-1
		Year	1988	1988	1988	1988	1988	1982	1987	1987	1978	1978	1978	1974	1974	1987
		System	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	3	3	3	3	3	2	3	3	1	1	1	1	1	3
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	1	1	1	4	4	1	1	1	1	1	4
		Sam. Depth	10	10	10	10	10	10	90	76	10	10	10	10	10	45
		Data Cit.	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE
CHC'S	ug/kg	a-BHC	< 0.002	< 0.06	< 0.002	< 0.17	< 0.17		< 5	< 5						< 5
	ug/kg	b-BHC	< 0.006	< 0.12	< 0.006	< 0.42	< 0.42		< 5	< 5						< 5
	ug/kg	BHC														
	ug/kg	g-BHC (lindane)	< 0.006	< 0.08	< 0.006	< 0.22	< 0.22		< 5	< 5						< 5
	ug/kg	Heptachlor	< 0.006	< 0.06	< 0.006	< 0.22	< 0.22		< 5	< 5						< 5
	ug/kg	Aldrin														
	ug/kg	Heptachlorepoxide														
	ug/kg	Endosulfan I														
	ug/kg	Dieldrin	< 0.01	< 0.04	< 0.01	< 0.4	< 0.4	< 0.1	< 5	< 5	0	0	0	< 10	< 10	< 5
	ug/kg	4,4'-DDE	< 0.01	< 0.08	< 0.01	< 0.58	< 0.58	< 0.1	< 5	< 5	0	0	0	< 10	< 10	< 5
	ug/kg	Endrin	< 0.02	< 0.12	< 0.02	< 4.4	< 4.4	< 0.1	< 5	< 5	0	0	0	< 10	< 10	5.9
	ug/kg	Endosulfan II														
	ug/kg	4,4'-DDD	< 0.01	< 0.22	< 0.01	< 1.3	< 1.3	< 0.1	< 5	< 5	0	0	0	< 10	< 10	< 5
	ug/kg	Endrinaldehyde														
	ug/kg	Sulfan sulfate														
	ug/kg	4,4'-DDT	< 0.01	< 0.24	< 0.01	< 0.87	< 0.87	< 0.1	< 5	< 5	0	0	0	< 10	< 10	< 5
	ug/kg	Methoxychlor														
	ug/kg	Endrinketone														
	ug/kg	Chlorodane	< 0.04	< 0.28	< 0.04	< 1.2	< 1.2	< 1	< 5	< 5	0	0	0	< 10	< 10	< 5
	ug/kg	Toxaphene														
METALS	mg/kg	Ag (silver)														
	mg/kg	Al (aluminum)														
	mg/kg	As (arsenic)	4.43	11	3.96	1.8	1.9	3.2	< 1.2	19.3	0	0	0	< 1	< 1	24.5
	mg/kg	B (boron)														
	mg/kg	Ba (barium)									0	0	0			
	mg/kg	Be (beryllium)														
	mg/kg	Cd (cadmium)	1.66	1.1	0.8	1	1.4	0.66	< 1.5	< 1.5	< 10	< 10	< 10	< 1	< 1	< 1.5
	mg/kg	Cr (chromium)	23.8	18	12.8	16	22	11	< 3.7	< 3.7	< 10	< 10	< 10	29	30	< 3.7
	mg/kg	Cu (copper)	16.3	11	9.17	7.5	10	8.8	22.6	22.6	< 10	< 10	< 10	2	5	8.9
	mg/kg	Fe (iron)						7400			2600	2400	2100			
	mg/kg	Hg (mercury)	0.29	0.18	0.15	0.08	0.22	0.027	< 0.8	< 0.8	0	0	0	< 0.1	< 0.1	< 0.8
	mg/kg	Mg (magnesium)														
	mg/kg	Mn (manganese)	730	640	548	400	400		757	1035.2	120	130	130			862.7
	mg/kg	Mo (molybdenum)														
	mg/kg	Ni (nickel)	15.8	13	9.66	9.2	10	8	27.8	27.8	< 10	< 10	< 10	17	18	< 12.9
	mg/kg	Pb (lead)	31.2	22	17.5	12	13	6.6	37.1	31.5	20	20	20	< 9	< 9	30
	mg/kg	Sb (antimony)														
	mg/kg	Se (selenium)	< 0.35	< 18	< 0.3	< 0.75	< 0.75									
	mg/kg	Sn (tin)														
	mg/kg	Sr (strontium)														
	mg/kg	Ti (titanium)														
	mg/kg	Zn (zinc)	85.1	58	45.7	38	46	35	129.1	137.8	10	20	< 10	13	12	116.1
	mg/kg	V (vanadium)														
PCB'S	ug/kg	Aroclor-1006	< 0.15	< 1.2	< 0.15	< 3	< 3									
	ug/kg	Aroclor-1221														
	ug/kg	Aroclor-1232														
	ug/kg	Aroclor-1242														
	ug/kg	Aroclor-1248														
	ug/kg	Aroclor-1254	100	< 2.4	72	< 3	< 3									
	ug/kg	Aroclor-1260	< 0.25	< 2.4	< 0.25	< 3	< 3									
	ug/kg	Total PCB's						0	0	0	2	1	1	0	0	0
PARTICLE SIZE %FINER	SAND coarse	3 in									100	100	100	100	100	
		1 1/2						100			100	100	100	100	100	
		3/4						100			100	100	100	100	100	
		3/8						100			100	100	100	100	100	
		4						100			100	99	99	100	100	
		8						100						100	100	
		10									90	75	80			
	SAND medium	16						100						98.0	98.0	
		20									78.0	67.0	65.0			
		30						98.0								
		40						93.0			18.0	16.0	15.0	76.0	76.0	
		50						85.0								
	SAND fine	70						76.0								
		80									12.0	10.0	10.0			
		100						71.0						5.0	5.0	
		140							99.3	93.8						
	SILT	200						67.0			10.0	8.0	8.0	0.0	0.0	
	CLAY	270						66.0	76.3	72.2						
		0.20 mm						48.0	33.9	35.0	8.0	6.0	7.0	0.0	0.0	
		0.05 mm						23.0	33.8	35.0	5.0	5.0	5.0	0.0	0.0	
MISC	%	Total Organic Carb	0.71		1.7				5.98	3.03						
	mg/kg	Chem Oxy Demand						47500			2300	1100	6600	1712	2303	
	mg/kg	Kjedahl Nitrogen						1400			380	280	320	88	148	
	mg/kg	Total Phosph						590			170	84	110	205	225	
	mg/kg	Oil and Grease						430			0	0	0	149	147	
	mg/kg	Cyanide, Total														
	mg/kg	Ammonia														
	mg/l	Ammonia Elutriate														
	%	Moisture														
	%	Total Solids														
	%	Volatile Solids														

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	123	124	125	617	126	481	482	127	128	483	484	129	130	131
		River Mile	784.61	784.6	784.2	780	773	772.8	772.8	772.79	767.1	766.9	766.9	763.51	763.5	763.0
		Location	WACOUTA POINT	WACOUTA POINT	WACOUTA POINT	L-Lake Pepin Maiden	LAKE CITY SM BOAT	LAKE CITY SM BOAT	LAKE CITY SM BOAT		PEPIN SM BOAT	PEPIN SM BOAT	PEPIN SM BOAT	MOUTH OF CHIP. RIVER	MOUTH OF CHIP. RIVER	READS LANDING
		Year	1978	1978	1978	1987	1981	1989	1989	1974	1982	1989	1989	1982	1982	1974
		System	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	1	1	1	3	2	2	2	1	2	2	2	1	1	1
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	3	1	1	1	1	1	1	1	1	1	1
		Sam. Depth	10	10	10	45	10	10	10	10	10	10	10	10	10	10
		Data Cit.	COE	COE	COE	WDNR	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE
CH'C'S	ug/kg	a-BHC						< 0.2	< 0.07			< 0.07	< 0.09			
	ug/kg	b-BHC						< 0.39	< 0.15			< 0.15	< 0.18			
	ug/kg	BHC						< 0.59	< 0.22			< 0.22	< 0.26			
	ug/kg	g-BHC (lindane)						< 0.26	< 0.1			< 0.1	< 0.12			
	ug/kg	Heptachlor						< 0.2	< 0.07			< 0.07	< 0.09			
	ug/kg	Aldrin						< 0.26	< 0.01			< 0.1	< 0.12			
	ug/kg	Heptachlorepoxide						< 0.33	< 0.12			< 0.12	< 0.15			
	ug/kg	Endosulfan I						< 0.33	< 0.12			< 0.12	< 0.15			
	ug/kg	Dieldrin	0		< 1			< 0.33	< 0.12	< 10	< 0.1	< 0.12	< 0.15	< 0.1	< 0.1	< 10
	ug/kg	4,4'-DDE	0					< 0.26	< 0.1	50	< 0.1	< 0.1	< 0.12	< 0.1	< 0.1	< 10
	ug/kg	Endrin	0		< 1			< 0.59	< 0.22	< 10	< 0.1	< 0.22	< 0.26	< 0.1	< 0.1	< 10
	ug/kg	Endosulfan II						< 0.65	< 0.24			< 0.25	< 0.29			
	ug/kg	4,4'-DDD	0					< 0.72	< 0.27	< 10	< 0.1	< 0.27	< 0.32	2.2	< 0.1	< 10
	ug/kg	Endrinaldehyde						< 0.72	< 0.27			< 0.27	< 0.32			
	ug/kg	Sulfan sulfate						< 0.72	< 0.27			< 0.27	< 0.32			
	ug/kg	4,4'-DDT	0		< 4			< 0.85	< 0.31	< 10	700	< 0.32	< 0.38	16.7	< 0.1	< 10
	ug/kg	Methoxychlor						< 1.44	< 0.53			< 0.55	< 0.65			
	ug/kg	Endrinketone						< 0.72	< 0.27			< 0.27	< 0.32			
	ug/kg	Chlorodane	0					< 3.92	< 1.45	< 10	< 1	< 1.49	< 1.76	< 1	< 1	< 10
	ug/kg	Toxaphene						< 3.92	< 1.45			< 1.49	< 1.76			
METALS	mg/kg	Ag (silver)														
	mg/kg	Al (aluminum)														
	mg/kg	As (arsenic)	0	0	3.15		1	3.4	1.7	4	1.8	< 1.14	< 1.11	1.3	1.1	< 0.9
	mg/kg	B (boron)														
	mg/kg	Ba (barium)	30	10			90									
	mg/kg	Be (beryllium)														
	mg/kg	Cd (cadmium)	< 10	< 10	4	< 1	2	< 2.98	< 1.24	9	0.35	< 1.24	< 1.22	< 0.19	< 0.19	< 1
	mg/kg	Cr (chromium)	< 10	10	63.6		10	31.3	15.7	115	7.1	9.9	7.8	4.8	3.8	8
	mg/kg	Cu (copper)	< 10	< 10	23.5		20	79.8	20.9	58	7.1	8.4	7.9	3.9	2.8	10
	mg/kg	Fe (iron)	3600	2200	22800		14000				4900			5100	3800	
	mg/kg	Hg (mercury)	2.2	1.4	0.077		< 0.01	0.2	< 0.01	5.4	0.031	< 0.01	< 0.01	< 0.01	< 0.01	0.3
	mg/kg	Mg (magnesium)														
	mg/kg	Mn (manganese)	290	130	879		900	1290	264			311	268			
	mg/kg	Mo (molybdenum)														
	mg/kg	Ni (nickel)	< 10	< 10	30		20	25.5	14.7	35	6	10.3	9.9	5	5	8
	mg/kg	Pb (lead)	20	< 10	42	< 10	460	29.7	84	47	11	7.3	7.7	2	2	< 7
	mg/kg	Sb (antimony)														
	mg/kg	Se (selenium)						< 2.3	< 0.95			< 0.95	< 0.93			
	mg/kg	Sn (tin)														
	mg/kg	Sr (strontium)														
	mg/kg	Ti (titanium)														
	mg/kg	Zn (zinc)	18	< 10	88.8		78	117	< 0.65	185	28	22.7	27.8	14	13	19
	mg/kg	V (vanadium)														
PCB'S	ug/kg	Aroclor-1006						< 3.92	< 1.45			< 1.49	< 1.76			
	ug/kg	Aroclor-1221						< 3.92	< 1.45			< 1.49	< 1.76			
	ug/kg	Aroclor-1232						< 3.92	< 1.45			< 1.49	< 1.76			
	ug/kg	Aroclor-1242						< 3.92	< 1.45			< 1.49	< 1.76			
	ug/kg	Aroclor-1248						< 3.92	< 1.45			< 1.49	< 1.76			
	ug/kg	Aroclor-1254						< 8.18	< 3.03			< 3.1	< 3.68			
	ug/kg	Aroclor-1260						< 8.18	< 3.03			< 3.1	< 3.68			
	ug/kg	Total PCB's	1	0	65	0	0			0	0			0	0	0
PARTICLE SIZE %FINER		3 in	100	100	100											
	SAND coarse	1 1/2	100	100	100		100				100			100	100	
		3/4	100	100	100		100				100			100	100	
		3/8	100	100	100		100				98			100	100	
		4	100	100	100		100	100	85.0		97	100		98	100	
		8					100				95			96	99	
		10	100	99				100	79.0			97.9				
	SAND fine medium	16					100	98.9	68.0		92.0	91.1		93.0	97.0	
		20	100.0	90.0												
		30					98.0	95.9	25.2		81.0	67.1		79.0	69.0	
		40	99.0	41.0			90.0				65.0			45.0	49.0	
		50					72.0	95.9	25.2		42.0	67.1		11.0	30.0	
		70					52.0				27.0			4.0	10.0	
		80	67.0	3.0				91.6	4.7			23.7				
		100					35.0	82.7	0.7		21.0	3.2		3.0	4.0	
		140						78.8	0.7			2.5				
	SILT CLAY	200	22.0	1.0	67.0		22.0	70.0	0.4		18.0	1.8		2.0	3.0	
		270					21.0	55.6			17.0	1.5		2.0	3.0	
		0.20 mm	8.0	0.0			13.0	46.3			9.0	1.4		1.0	1.0	
		0.05 mm	2.0	0.0	44.0		4.0	31.2			4.0	1.1		0.0	0.0	
MISC	%	Total Organic Carb						25.4	0.6			0.7	1.7			
	mg/kg	Chem Oxy Demand	15000	2800	89800		110000			113005	12800			585	1686	772
	mg/kg	Kjedahl Nitrogen	1200	410	1690		11300			4121	600			26	35	48
	mg/kg	Total Phosph	430	93	951		--			1769	230			94	111	232
	mg/kg	Oil and Grease	0	0	710		--			2825	205			< 50	< 50	85
	mg/kg	Cyanide, Total						< 2.2	< 0.63			< 0.63	< 0.68			
	mg/kg	Ammonia						232	2.3			3.3	10			
	mg/l	Ammonia Elutriate														
	%	Moisture						76.9	21.1			20.8	26.6			
	%	Total Solids						23.1	78.9			79.2	73.4			
	%	Volatile Solids						12.3	1.6			1.3	1.3			

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	132	480	133	134	479	135	136	137	138	139	140	141	142	705
		River Mile	763	763	762.5	762.3	762.1	761.9	760	759.08	759.07	759.03	759.02	759.01	759	758.6
		Location	READS LANDING	READS LANDING	READS LANDING	READS LANDING	READS LANDING	READS LANDING	WABASHA SM BOAT	ABOVE CRATS ISLAND	ABOVE CRATS ISLAND	ABOVE CRATS ISLAND	ABOVE CRATS ISLAND	ABOVE CRATS ISLAND	ABOVE CRATS ISLAND	R-Bay Lower End of Island
		Year	1974	1989	1980	1980	1989	1980	1981	1974	1974	1982	1982	1978	1978	1985
		System	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	1	1	1	1	1	1	2	1	1	1	1	1	1	3
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	1	1	1	1	1	1	1	1	1	1	2
		Sam. Depth	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Data Clt.	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	COE	FWS
CHC'S	ug/kg	a-BHC		< 0.08			< 0.74									< 10
	ug/kg	b-BHC		< 0.15			< 1.48									< 10
	ug/kg	BHC		< 0.23			< 2.21									
	ug/kg	g-BHC (lindane)		< 0.1			< 0.98									< 10
	ug/kg	Heptachlor		< 0.08			< 0.74									< 10
	ug/kg	Aldrin		< 0.1			< 0.98									
	ug/kg	Heptachlorepoxide		< 0.13			< 1.23									
	ug/kg	Endosulfan I		< 0.13			< 1.23									
	ug/kg	Dieldrin	< 10	< 0.13	< 0.2	0	< 1.23	0		< 10	< 10	< 0.1	< 0.1	0	0	< 10
	ug/kg	4,4'-DDE	< 10	< 0.1	< 0.2	0	< 0.98	0		< 10	< 10	< 0.1	< 0.1	0	0	< 10
	ug/kg	Endrin	< 10	< 0.23	< 0.2	0	< 2.21	0		< 10	< 10	< 0.1	< 0.1	0	0	< 10
	ug/kg	Endosulfan II		< 0.26			< 2.46									
	ug/kg	4,4'-DDD	< 10	< 0.28	< 0.2	0	< 2.71	0		< 10	< 10	< 0.1	< 0.1	0	0	< 10
	ug/kg	Endrinaldehyde		< 0.28			< 2.71									
	ug/kg	Sulfan sulfate		< 0.28			< 2.71									
	ug/kg	4,4'-DDT	< 10	< 0.33	< 0.4	0	< 3.2	0		< 10	< 10	< 0.1	< 0.1	0	0	< 10
	ug/kg	Methoxychlor		< 0.56			< 5.41									
	ug/kg	Endrinketone		< 0.28			< 2.71									
	ug/kg	Chlorodane	< 10	< 1.54	< 0.4	0	< 14.76	0		< 10	< 10	< 1	< 1	0	0	< 10
	ug/kg	Toxaphene		< 1.54			< 14.76									
METALS	mg/kg	Ag (silver)														< 0.4
	mg/kg	Al (aluminum)														6520
	mg/kg	As (arsenic)	< 1	1		0	1.4	0	< 1	< 0.9	1	3	1.7	0	0	< 7
	mg/kg	B (boron)														7
	mg/kg	Ba (barium)				20		10	80					30	30	203
	mg/kg	Be (beryllium)														0.44
	mg/kg	Cd (cadmium)	< 1	< 1.2	0.755	< 10	< 1.1	< 10	1	1	1	< 0.19	0.2	< 10	< 10	1.3
	mg/kg	Cr (chromium)	5	5.9	14.5	< 10	8.4	< 10	< 10	7	7	15	4	< 10	20	25
	mg/kg	Cu (copper)	7	< 1.6	1.62	< 10	2.1	< 10	10	7	7	5.7	4	< 10	< 10	19
	mg/kg	Fe (iron)			10320	4200		4000	11000			10000	5200	2700	2400	20400
	mg/kg	Hg (mercury)	0.4	< 0.14	< 0.01	0	< 0.12	0	< 0.01	1.4	0.6	0.017	0.015	0	0	0.06
	mg/kg	Mg (magnesium)														3570
	mg/kg	Mn (manganese)		292		240	269	180	920					260	310	< 2340
	mg/kg	Mo (molybdenum)														2
	mg/kg	Ni (nickel)	5	< 6.2	12.8	< 10	8.44	< 10	< 10	7	7	10	6	< 10	< 10	20
	mg/kg	Pb (lead)	< 7	3.1	2.56	< 10	0.79	< 10	80	< 7	< 7	4	2	< 10	< 10	25
	mg/kg	Sb (antimony)														< 4
	mg/kg	Se (selenium)		< 0.95			< 0.84									< 10
	mg/kg	Sn (tin)														< 2
	mg/kg	Sr (strontium)														61.1
	mg/kg	Ti (titanium)														20
	mg/kg	Zn (zinc)	13	15.1	48	20	17	40	72	17	17	26	15	10	10	74.9
	mg/kg	V (vanadium)														< 17
PCB'S	ug/kg	Aroclor-1006		< 1.54			< 14.76									
	ug/kg	Aroclor-1221		< 1.54			< 14.76									
	ug/kg	Aroclor-1232		< 1.54			< 14.76									
	ug/kg	Aroclor-1242		< 1.54			< 14.76									
	ug/kg	Aroclor-1248		< 1.54			< 14.76									
	ug/kg	Aroclor-1254		< 3.2			< 30.75									
	ug/kg	Aroclor-1260		< 3.2			< 30.75									
	ug/kg	Total PCB's	0		0	0		0	0	0	0	0	0	0	0	0
PARTICLE SIZE %FINER	SAND coarse	3 in	100		100	100		100		100	100			100	100	
		1 1/2	100		100	100		100	100	100	100	100	100	100	100	
		3/4	96		100	100		100	100	100	100	98	100	100	100	
		3/8	89		100	100		100	100	100	100	96	100	100	100	
		4	84	100	100	100	94.0	98	100	99	99	88	100	100	95	
		8	74		98	98		95	100	93	93	83	98			
		10		100			90.7							96	87	
	SAND medium	16	58.0	99.8	90.0	91.0	79.5	87.0	97.0	80.0	80.0	74.0	91.0			
		20												76.0	66.0	
		30		98.8			15.8		85.0			49.0	65.0			
		40	4.0		30.0	17.0		33.0	71.0	12.0	12.0	26.0	33.0	30.0	27.0	
		50		98.8			15.8		54.0			6.0	6.0			
	SAND fine	70							40.0			2.0	3.0			
		80		81.8			0.4							2.0	2.0	
		100	0.0	3.2	2.0	1.0	0.1	1.0	28.0	0.0	0.0	1.0	2.0			
		140		2.0												
	SILT CLAY	200	0.0	1.4	1.0	0.0		0.0	21.0	0.0	0.0	1.0	2.0	1.0	1.0	
		270		0.7					20.0			1.0	2.0			
		0.20 mm	0.0	0.5	1.0	0.0		0.0	11.0	0.0	0.0	1.0	1.0	0.0	0.0	
		0.05 mm	0.0		1.0	0.0		0.0	5.0	0.0	0.0	0.0	0.0	0.0	0.0	
MISC	%	Total Organic Carb		0.18			0.009									
	mg/kg	Chem Oxy Demand	960		527	1600		1300	16000	< 481	< 453	952	956	1600	1700	
	mg/kg	Kjedahl Nitrogen	44		--	600		460	1280	117	42	68	44	130	250	
	mg/kg	Total Phosph	227		672	--		--	--	235	188	270	233	67	240	
	mg/kg	Oil and Grease	60		185	0		0	--	101	126	< 50	< 50	0	0	
	mg/kg	Cyanide, Total		< 0.68			< 0.6									
	mg/kg	Ammonia		5.6			0.36									
	mg/l	Ammonia Elutriate														
	%	Moisture		26			16.7									
	%	Total Solids		74			83.3									
	%	Volatile Solids		0.8			0.5									

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

		Record #	143	144	145	146	147	706	148	149	150	151	455	152	153	154
		River Mile	757.53	757.52	757.51	757.5	757.49	757.3	756.8	756.32	755.8	754.6	754.5	754.4	754.21	754.2
		Location	AB. TEEPEEOTA POINT	AB. TEEPEEOTA POINT	AB. TEEPEEOTA POINT	AB. TEEPEEOTA POINT	AB. TEEPEEOTA POINT	L-Bay Down. of Disposal	GRAND ENCAMPMENT	GRAND ENCAMPMENT	GRAND ENCAMPMENT	BEEF SLOUGH	ALMA SM BOAT	BEEF SLOUGH	BEEF SLOUGH	BEEF SLOUGH
		Year	1982	1982	1978	1978	1974	1985	1980	1974	1980	1982	1989	1982	1978	1978
		System	1	1	1	1	1	1	1	1	1	1	1	1	1	1
		Habitat Type	1	1	1	1	1	3	1	1	1	1	2	1	1	1
		Pool	4	4	4	4	4	4	4	4	4	4	4	4	4	4
		Sam. Gear	1	1	1	1	1	2	1	1	1	1	1	1	1	1
		Sam. Depth	10	10	10	10	10	10	10	10	10	10	10	10	10	10
		Data Cit.	COE	COE	COE	COE	COE	FWS	COE	COE	COE	COE	COE	COE	COE	COE
CHC'S	ug/kg	a-BHC						< 10					< 0.08			
	ug/kg	b-BHC						< 10					< 0.14			
	ug/kg	BHC											< 0.22			
	ug/kg	g-BHC (lindane)						< 10					< 0.1			
	ug/kg	Heptachlor						< 10					< 0.07			
	ug/kg	Aldrin											< 0.1			
	ug/kg	Heptachlorepoxide											< 0.12			
	ug/kg	Endosulfan I											< 0.12			
	ug/kg	Dieldrin	< 0.1	< 0.1	0	0	< 10	< 10	0	< 10	0	< 0.1	< 0.12	< 0.1	0	0
	ug/kg	4,4'-DDE	< 0.1	< 0.1	0	0	< 10	< 10	0	< 10	0	< 0.1	< 0.1	< 0.1	0	0
	ug/kg	Endrin	< 0.1	< 0.1	0	0	< 10	< 10	0	< 10	0	< 0.1	< 0.22	< 0.1	0	0
	ug/kg	Endosulfan II											< 0.24			
	ug/kg	4,4'-DDD	< 0.1	< 0.1	0	0	< 10	< 10	0	< 10	0	< 0.1	< 0.26	< 0.1	0	0
	ug/kg	Endrinaldehyde											< 0.26			
	ug/kg	Sulfan sulfate											< 0.26			
	ug/kg	4,4'-DDT	< 0.1	< 0.1	0	0	< 10	10	0	< 10	0	< 0.1	< 0.31	27	0	0
	ug/kg	Methoxychlor											< 0.53			
	ug/kg	Endrinketone											< 0.26			
	ug/kg	Chlorodane	< 1	< 1	0	0	< 10	< 10	0	< 10	0	< 1	< 1.44	< 1	0	0
	ug/kg	Toxaphene											< 1.44			
METALS	mg/kg	Ag (silver)						< 0.4								
	mg/kg	Al (aluminum)						11500								
	mg/kg	As (arsenic)	1.4	1.8	0	0	0.9	< 7	0	< 0.8	0	2	1.5	1.5	0	0
	mg/kg	B (boron)						5								
	mg/kg	Ba (barium)			30	30		141	20		20				10	10
	mg/kg	Be (beryllium)						0.65								
	mg/kg	Cd (cadmium)	< 0.2	0.19	< 10	< 10	1	0.8	< 10	< 1	< 10	< 0.2	< 1.2	< 0.2	< 10	< 10
	mg/kg	Cr (chromium)	4	3.9	< 10	< 10	6	34	< 10	7	< 10	5.9	7	4	< 10	< 10
	mg/kg	Cu (copper)	3	3.5	< 10	< 10	6	26	< 10	10	< 10	3.9	3.2	3	< 10	< 10
	mg/kg	Fe (iron)	4000	4550	1900	2300		24500	3400		3400	6200		4400	2000	2200
	mg/kg	Hg (mercury)	0.027	0.01	0	0	0.4	0.06	0	0.4	0	< 0.01	< 0.12	0.01	0	0
	mg/kg	Mg (magnesium)						5110								
	mg/kg	Mn (manganese)			250	250		< 866	220		160		376		180	130
	mg/kg	Mo (molybdenum)						3								
	mg/kg	Ni (nickel)	10	5	< 10	< 10	6	22	< 10	5	< 10	7	6.1	6	< 10	< 10
	mg/kg	Pb (lead)	2	2	< 10	< 10	< 11	26	< 10	< 7	< 10	2	< 0.52	2	< 10	< 10
	mg/kg	Sb (antimony)						< 4								
	mg/kg	Se (selenium)						< 10					< 0.88			
	mg/kg	Sn (tin)						< 2								
	mg/kg	Sr (strontium)						25.4								
	mg/kg	Ti (titanium)						20								
	mg/kg	Zn (zinc)	26	14	10	10	16	98.8	14	15	12	16	17	14	12	10
	mg/kg	V (vanadium)						< 25								
PCB'S	ug/kg	Aroclor-1006											< 1.44			
	ug/kg	Aroclor-1221											< 1.44			
	ug/kg	Aroclor-1232											< 1.44			
	ug/kg	Aroclor-1242											< 1.44			
	ug/kg	Aroclor-1248											< 1.44			
	ug/kg	Aroclor-1254											< 3			
	ug/kg	Aroclor-1260											< 3			
	ug/kg	Total PCB's	0	0	0	0	0	0	0	0	4	0		0	0	0
PARTICLE SIZE %FINER	SAND coarse	3 in			100	100	100		100	100	100				100	100
		1 1/2	100	100	100	100	100		100	100	100	100		100	100	100
		3/4	100	100	100	100	100		100	100	100	100		100	100	100
		3/8	100	100	100	100	100		100	100	100	100		100	100	100
		4	99	100	98	99	96		100	100	100	100	99.1	99	100	100
		8	98	99			92		100	98	100	99		99		
		10			96	90							98.0		99	100
	SAND medium	16	97.0	95.0			82.0		98.0	95.0	95.0	96.0	93.7	97.0		
		20			83.0	73.0									93.0	95.0
		30	75.0	66.0								59.0	61.9	86.0		
		40	46.0	31.0	44.0	36.0	28.0		48.0	21.0	37.0	31.0		69.0	59.0	46.0
		50	17.0	8.0								14.0	61.9	31.0		
	SAND fine	70	5.0	2.0								6.0		10.0		
		80			2.0	3.0							5.7		3.0	2.0
		100	4.0	2.0			0.0		1.0	0.0	3.0	4.0	0.4	4.0		
		140											0.3			
	SILT CLAY	200	4.0	1.0	1.0	0.0	0.0		0.0	0.0	1.0	3.0		3.0	0.0	1.0
		270	3.0	1.0								2.0		3.0		
		0.20 mm	1.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	1.0		1.0	0.0	0.0
		0.05 mm	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0		0.0	0.0	0.0
MISC	%	Total Organic Carb											0.042			
	mg/kg	Chem Oxy Demand	803	730	2200	2800	< 515		550	< 400	1700	959		1713	1800	2000
	mg/kg	Kjedahl Nitrogen	177	44	260	200	66		160	13	220	29		82	220	170
	mg/kg	Total Phosph	270	186	140	35	117		--	229	--	147		184	180	35
	mg/kg	Oil and Grease	< 50	< 50	0	0	801		0	756	0	< 50		< 50	0	0
	mg/kg	Cyanide, Total											< 0.63			
	mg/kg	Ammonia											0.31			
	mg/l	Ammonia Elutriate														
	%	Moisture											20.3			
	%	Total Solids											79.7			
	%	Volatile Solids											0.4			

Table 6. Contaminant Data for Pool 4 of the Upper Mississippi River

			Record #	155	457	458			156	456
			River Mile	754	754	754	754	754	753.99	753.9
			Location	BEEF SLOUGH	BEEF SLOUGH	BEEF SLOUGH	BEEF SLOUGH 1	BEEF SLOUGH 1	ALMA SM BOAT	ALMA SM BOAT
			Year	1974	1989	1989	1994	1994	1979	1989
			System	1	1	1	1	1	1	1
			Habitat Type	1	1	1	1	1	2	2
			Pool	4	4	4	4	4	4	4
			Sam. Gear	1	1	1	1	1	1	1
			Sam. Depth	10	10	10	10	10	10	10
			Data Cit.	COE	COE	COE	COE	COE	COE	COE
CHC'S	ug/kg	a-BHC		< 0.18	< 0.17	< 0.24	< 0.25		< 0.08
	ug/kg	b-BHC		< 0.35	< 0.33	< 0.24	< 0.25		< 0.15
	ug/kg	BHC		< 0.53	< 0.5	< 0.24	< 0.25		< 0.23
	ug/kg	g-BHC (lindane)		< 0.24	< 0.22	< 0.24	< 0.25		< 0.1
	ug/kg	Heptachlor		< 0.18	< 0.17	< 0.24	< 0.25		< 0.08
	ug/kg	Aldrin		< 0.24	< 0.22				< 0.1
	ug/kg	Heptachlorepoxide		< 0.3	< 0.28				< 0.13
	ug/kg	Endosulfan I		< 0.3	< 0.28				< 0.13
	ug/kg	Dieldrin	< 10	< 0.3	< 0.28	< 0.47	< 0.49	0	< 0.13
	ug/kg	4,4'-DDE	10	< 0.24	< 0.22	< 0.47	< 0.49	0	< 0.1
	ug/kg	Endrin	< 10	< 0.53	< 0.5	< 0.47	< 0.49	0	< 0.23
	ug/kg	Endosulfan II		< 0.59	< 0.55				< 0.25
	ug/kg	4,4'-DDD	< 10	< 0.65	< 0.61	< 0.47	< 0.49	0.3	< 0.28
	ug/kg	Endrinaldehyde		< 0.65	< 0.61				< 0.28
	ug/kg	Sulfan sulfate		< 0.65	< 0.61				< 0.28
	ug/kg	4,4'-DDT	< 10	< 0.77	< 0.72	< 0.47	< 0.49	0	< 0.33
	ug/kg	Methoxychlor		< 1.3	< 1.21				< 0.55
	ug/kg	Endrinketone		< 0.65	< 0.61				< 0.28
	ug/kg	Chlorodane	< 10	< 3.54	< 3.31	< 0.24	< 0.25	1	< 1.5
	ug/kg	Toxaphene		< 3.54	< 3.31				< 1.5
METALS	mg/kg	Ag (silver)							
	mg/kg	Al (aluminum)							
	mg/kg	As (arsenic)	< 0.7	7.9	11.2	1	0.78	0	1.2
	mg/kg	B (boron)							
	mg/kg	Ba (barium)						70	
	mg/kg	Be (beryllium)							
	mg/kg	Cd (cadmium)	< 1	< 2.7	< 2.6	0.37	0.38	< 10	1.1
	mg/kg	Cr (chromium)	23	27	30	6.5	5.2	10	5.1
	mg/kg	Cu (copper)	8	9.4	17.2	3.9	2.6	10	2.7
	mg/kg	Fe (iron)						12000	
	mg/kg	Hg (mercury)	0.4	< 0.29	< 0.28	< 0.05	< 0.05	0	< 0.12
	mg/kg	Mg (magnesium)							
	mg/kg	Mn (manganese)		1280	929	291	234	550	223
	mg/kg	Mo (molybdenum)							
	mg/kg	Ni (nickel)	17	16	21.2	6	4.7	20	< 5.7
	mg/kg	Pb (lead)	28	11.6	16	1.3	1.8	20	< 0.52
	mg/kg	Sb (antimony)							
	mg/kg	Se (selenium)		< 2	< 1.9				< 0.87
	mg/kg	Sn (tin)							
	mg/kg	Sr (strontium)							
	mg/kg	Ti (titanium)							
	mg/kg	Zn (zinc)	17	70.5	85.2	14.6	12.7	40	13.5
	mg/kg	V (vanadium)							
PCB'S	ug/kg	Aroclor-1006		< 3.54	< 3.31	< 4.7	< 4.9		< 1.5
	ug/kg	Aroclor-1221		< 3.54	< 3.31	< 4.7	< 4.9		< 1.5
	ug/kg	Aroclor-1232		< 3.54	< 3.31	< 4.7	< 4.9		< 1.5
	ug/kg	Aroclor-1242		< 3.54	< 3.31	< 4.7	< 4.9		< 1.5
	ug/kg	Aroclor-1248		< 3.54	< 3.31	< 4.7	< 4.9		< 1.5
	ug/kg	Aroclor-1254		< 7.38	< 6.9	< 4.7	< 4.9		< 3.13
	ug/kg	Aroclor-1260		< 7.38	< 6.9	< 4.7	< 4.9		< 3.13
	ug/kg	Total PCB's	0					15	
PARTICLE SIZE %FINER	SAND coarse	3 in	100					100	
		1 1/2	100					100	
		3/4	100					100	
		3/8	100					100	
		4	100	100	100	100		100	99.7389
		8	98						
		10		100	100	95.3	100	100	99.1158
	SAND medium	16	95.0	98.6	99.7				93.5
		20				75.7	99.1	100	
		30		97.2	96.8				51.9
		40	50.0			29.1	68.8	90.0	
		50		97.2	96.8				51.9
	SAND fine	70							
		80		95.7	86.9			63.0	4.3
		100	4.0	86.9	78.0	0.7	2.0		0.0
		140		82.3	75.8	0.5	1.0		
	SILT CLAY	200	0.0	50.3	60.2	0.4	0.8	56.0	
		270		32.6	42.7				
		0.20 mm	0.0	25.1	32.0			26.0	
		0.05 mm	0.0	16.6	23.5			7.0	
MISC	%	Total Organic Carb		14.8	5.61	0.021			0.009
	mg/kg	Chem Oxy Demand	5867					48000	
	mg/kg	Kjedahl Nitrogen	273					6300	
	mg/kg	Total Phosph	166					1300	
	mg/kg	Oil and Grease	624					0	
	mg/kg	Cyanide, Total		< 1.5	< 1.4	< 0.06	< 0.07		< 0.62
	mg/kg	Ammonia		149	76				0.37
	mg/l	Ammonia Elutriate				< 0.06	< 0.06		
	%	Moisture		65.9	64.1	16	25.5		19.3
	%	Total Solids		34.1	35.9	84	74.5		80.7
	%	Volatile Solids		8.5	7.7	1	0.82		0.4